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(54) INTRAOCULAR LENS IMPLANT HAVING EYE ACCOMMODATING CAPABILITIES

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This patent is subject to a terminal dis-

claimer.

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Related U.S. Application Data

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(52) **U.S. Cl.** **623/6.37**; 623/6.11; 623/6.13

(56) References Cited

U.S. PATENT DOCUMENTS

4,790,847 12/1988 Woods .

4,842,601 6/1989 Smith . 5,275,623 1/1994 Sarfarazi . 5,674,282 10/1997 Cumming .

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(57) ABSTRACT

An intraocular lens (38) having focusing capabilities permitting focusing movement of the lens (38) in response to normal ciliary muscle movement incident to changes in the distance between the eye and an object under observation is provided. The lens (38) is designed for surgical implantation within the capsule (22) of an eye (10) and includes an optic (40) and a resilient body (46) which cooperate to form a discoid shaped lens (38) that generally conforms to the shape of the natural capsule (22). When distant objects are viewed, the ciliary body (32) is retracted and the capsule (22) flattens, thus causing the lens (38) to likewise flatten, moving the optic (40) posteriorly, closer to the fovea (26). When viewing near objects, the ciliary body (32) contracts, causing the capsule (22) and thus the lens (38) to expand to their original shape, shifting the optic (40) anteriorly, away from the fovea (26). The inventive lens (38) is preferably a unitarily formed, seamless body preferably comprising a flexible material which has elastic memory. Suitable materials comprise acrylates and silicone blends.

17 Claims, 2 Drawing Sheets

